was (8 ± 5.16 months) and (6.31 ± 1.75 kg), respectively. The age and weight in group B was (7.6 ± 3.9 months) and (4.84 ± 1.12) kg, respectively. There were no significant differences between the two groups in terms of post operative course, and major complications.

Conclusion: Failure to thrive was not associated with increase in ICU morbidity and mortality in children undergoing VSD closure. Attempt to optimize the body weight for age in children with CHD may not add any beneficial advantages in term of surgical risk or postoperative ICU outcome.

http://dx.doi:10.1016/j.jsha.2012.06.192

Impact of obesity on survival and New York Heart Association functional class in patients with systolic heart failure

Alaa Tayiem

Background: Several studies have shown that in patients with heart failure (HF), obesity is not associated with increased mortality, but rather is associated with improved survival. This has been referred to as the ''obesity paradox''.

Objective: To examine the impact of body mass index (BMI) on survival and New York Heart Association (NYHA) functional class in a Saudi outpatient population with chronic systolic HF.

Method: This retrospective, descriptive study, analyzed data from patients with chronic systolic HF and ejection fraction less than or equal 40% attending a Cardiovascular Disease Management program (CVDMP) over a mean follow-up of 48 months.

Patients were classified according to their baseline BMI. Continuous variables were presented as mean and frequencies while categorical variable presented as percentages.

Risks associated with BMI groups were evaluated using multinomial logistic regression model.

Results: Mortality in the total population ($n = 903$) was 3.3% where 47% were above age of 60 and 77% were male. Significant co-morbidities included; 67% diabetes mellitus, 67% hypertension, 12% bronchial asthma, 11% thyroid problems, 6% renal failure and 36% of patients had an EF less than 25%.

BMI showed significant increase in the last follow-up compared to baseline ($p < 0.000$). Obesity, measured by BMI, showed no statistical impact on mortality ($p < 0.319$), but did significantly impact NYHA functional class ($p < 0.023$).

Conclusion: There was a chronological increase in BMI, and, although this had no significant impact on mortality, it had a significant negative impact on NYHA functional class.

http://dx.doi:10.1016/j.jsha.2012.06.193

Improvement of mitral regurgitation after transcatheter aortic valve implantation (TAVI)

Husain Alamri, Ali Almasood, Saeed Alahmari, Saad Alkasab, Mohamed Alotaibi, Abdulrahman Almoghairi, Moheeb Alabdalah

Objectives: To assess the change in mitral regurgitation (MR) severity after transcatheter aortic valve implantation (TAVI).

Background: Mitral regurgitation (MR) is frequently present in patients with calcific aortic stenosis (AS). Following surgical aortic valve replacement, improvement in MR is reported in 27–82% of the patients. The changes in MR severity following TAVI are unknown.

Methods: From April 2009 to January 2011, 57 patients with severe symptomatic aortic stenosis underwent TAVI [40 cases Edwards Sapien valve (Edwards Lifesciences Inc, Irvine CA), and 17 cases the CoreValve ReValving System]. Transthoracic echocardiography was performed before and 3 months after successful TAVI procedure. MR was assessed by expert readers and by color flow mapping and was graded as none (grade 0), mild (grade 1), moderate (grade 2), moderately severe (grade 3) or severe (grade 4).

Results: The mean MR grade was 1.7 ± 1.0 and 0.9 ± 0.7 pre- and post-TAVI respectively (p value < 0.001). MR pretreatment was grade 0–1, grade 2, and grade 3–4 in 69%, 19%, and 12% of the patients, respectively. Six patients out of 7 (85%) with grade 3–4 demonstrated improvement (4 patients (57%) improved to mild, and 2 patients (28%) to moderate MR). Seven patients out of 11 (63%) with grade 2 demonstrated an improvement to grade 0–1. There was no association between the improvement of MR and the type of valve used.

Conclusions: MR improved significantly after TAVI for severe AS. Further study with careful echocardiographic evaluation of the mitral valve prior to TAVI may help to predict which patients should experience an improvement in their MR.

http://dx.doi:10.1016/j.jsha.2012.06.194

Catheter intervention for branch and crossed pulmonary arteries

Ali Al Akhfash, Mansour Al Mutairi, Omar Tamimi, Fahad Al Habshan

Introduction: Over the last decade, stent implantation has become a widely accepted, effective therapy for the treatment of pulmonary arterial (PA) stenoses. Stent implantation has proved to be a safe procedure with minimal complications.

Objectives: To review our experience with branch PA stenting. We reviewed also catheter based interventions for patients with right aortic arch and crossed pulmonary arteries associated with branch PA stenosis.